



Space Surveillance and Tracking (SST)

What is SST?

EU SST protects satellites and space infrastructure from collision risks, monitors in-orbit fragmentations, and uncontrolled re-entries, protecting EU missions like Galileo, EGNOS, Copernicus and GOVSATCOM, as well as national and commercial spacecraft. As part of the EU Space Programme's Space Situational Awareness component, it safeguards the European economies, societies and citizens who rely on space-based services.

The **EU SST Front Desk**, managed by EUSPA, is the central access point for SST services and information, providing satellite operators with timely warnings and expert guidance to prevent collisions and protect space assets.

Launch:

EU SST was initially established in 2014, and since 2021 it has been part of the EU Space Programme.



Implementation:

The EU SST Partnership, together with EUSPA acting as the EU SST Front Desk, work together to develop a European SST capability.



Purpose:

To contribute to the safety and sustainability of space operations by providing a set of Space Surveillance and Tracking services.



How does it work?

SST works by three functions:



Sensor

EU SST relies on a network of ground-based sensors owned by EU Member States that survey and track artificial objects orbiting Earth.



Processing

Advanced data processing and analysis capabilities turn thousands of daily measurements from the sensors into meaningful information for satellite owners and operators.



Service Provision

Services are provided to users through the SST Portal, managed by EUSPA. The EU SST Front Desk coordinates alerts, performance monitoring, and user support, acting as the interface between the EU SST Partnership and satellite operators.

What are the EU SST services?

EU SST provides three services:

- **Collision Avoidance**
Risk assessment of collision between spacecraft or between spacecraft and space debris, and collision avoidance alerts
- **Re-entry Analysis**
Risk assessment of uncontrolled re-entry of man-made space objects into the Earth's atmosphere and related information
- **Fragmentation Analysis**
Detection and characterisation of in-orbit fragmentations, break-ups or collisions

EUSPA, the EU SST Front Desk

Facts and figures

- EUSPA manages and operates the EU SST Front Desk.
- The Front Desk is the main interface for the delivery of SST information and services, including activities related to user support, performance monitoring, engagement and promotion.
- The SST Front Desk is hosted at EUSPA's Galileo Security Monitoring Centre (GSMC) in Madrid.
- EUSPA also contributes to EU SST's security activities, including the definition of the programme's security requirements and the implementation of security monitoring tasks.

600+

satellites safeguarded from collision risks

300+

organisations receiving services through the Front Desk

400k+

products delivered yearly through the SST Portal

Space traffic

Core operational capability for EU approach to Space Traffic Management

